DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014290 Address: 333 Burma Road **Date Inspected:** 20-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

Segment 7CE to 7DE (U-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for U-Rib to U-Rib at Panel Point (PP) 55 and PP 56 for Segment 7CE to 7DE. Inspected the Big Reinforcing Splice Plate installed area at U-Rib location 4th on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00353 Dated May 20, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220105 and final torque required was 380 N-m,

Bolt sizes used were M22 x 80 RC Set# DHGM220050 and final torque required was 486 N-m and

Bolt sizes used were M22 x 85 RC Set# DHGM220096 and final torque required was 583 N-m.

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Manual Torque wrench was been used with Sr. No. XQ2-667.

Note: U-Ribs numbering reference taken from Cross Beam as 1st U-Rib and Bike Path side as 39th U-Rib.

Segment 7CE ~ 7DE (Side Panel T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for Side Panel T-Ribs Cross Beam side and Bike Path Side between Panel Point (PP) 55 and PP 56 for Segment 7CE ~ 7DE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00353 Dated May 20, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220004 and final torque required was 380 N-m.

Bolt sizes used were M22 x 70 RC Set# DHGM220105 and final torque required was 453 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-667.

Note: Segment Splice to T Stiffeners (Bottom Plate Location) Except 180 bolts interfered by sea fasteners.

Segment 7DW (T-Ribs FL3 Location)

This Quality Assurance (QA) Inspector witnessed final tension verification for T-Rib to T-Rib at Side Panel Cross Beam side between Panel Point (PP) 56 to PP 56.5, PP 57 to PP 57.5 and PP 57.5 to PP 58 for Segment 7DW. Inspected the T-Ribs above the Splice Plates. Tension verified on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00352 Dated May 20, 2010

Bolt sizes used were M22 x 65 RC Set# DHGM220035 and final torque required was 433 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-779.

Note: T Stiffener Splice (Interior South SP at CB Side location) Except 5th, 6th, 7th, 13th ~ 19th, Stiffener of PP56 ~ PP56.5; 5th ~ 9th, 11th, 13th ~ 19th, Stiffener of PP57 ~ PP57.5; 2nd, Stiffener of PP57.5 ~ 58 from Bottom side.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer